82

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Poland: A Debt Payments Crunch for 1985

Even with a generous rescheduling agreement from the Paris Club, Poland will face a large financial gap in 1985. If the Paris Club reschedules all overdue principal and interest, debt service due to all creditors will total at least $3.8 billion (Scenario I of Table 1). Obligations could run several billion dollars more if the government creditors demanded minimal payments on the 1982-84 arrears (Scenarios II and III of Table 1). Since net earnings from services and new credits, according to our estimates, can cover only about $700 million, Warsaw would need a $3.1 billion hard currency trade surplus just to meet payments under the most generous rescheduling terms. 25X1

Poland's trade surplus in 1985 almost certainly will fall well short of $3.1 billion. Warsaw's projections given to the Paris Club call for a surplus of $1.4 billion. Calculations performed with our model of Polish GNP (POLGNP) indicate that the Polish 1985 plan targets for exports and domestic end-uses could generate a trade surplus of $1.5 billion at most under very optimistic assumptions (Table 2). Tougher austerity measures than envisioned in Warsaw's plan could not increase the surplus enough to close the financial gap. A 10-percent cut in consumption, investment, and government spending would raise the hard currency trade surplus to $2.4 billion next year, but reductions beyond 10-percent would yield little additional savings in hard currency imports. 25X1

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25X1

Optimistic Assumptions

Our projections rest on very optimistic assumptions about Polish domestic economic performance--so optimistic that our estimates of Polish hard currency import requirements under Warsaw's planned end-use targets are $150 million less than those called for in the 1985 plan. These assumptions include the following:

- good weather for agriculture;
- continued technological adjustment away from hard currency import dependence; in particular, relatively less imports of metals, machinery, mineral products, and processed foods and feeds;
- successful execution of the planned 6-percent cut in investment in 1985 without capital stock shortages affecting production;
- an improvement in efficiency that allows the economy to grow with only half the additions to working capital that have been historically necessary;
- a mix of exports that favors commodity groups with low import content--exports of coal and power gain at the expense of machinery and light industry;
- no further loss of net earnings due to deteriorating terms-of-trade.

Should any of these optimistic assumptions not hold in 1985, the shortfall in net hard currency earnings will be even greater. 25X1

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If Not in 1985, When and How?

Although our analysis shows that no plausible degree of austerity can produce a $3.1 billion hard currency trade surplus in 1985, the Polish economy is undergoing significant technological adjustment away from hard currency import dependence. As a result of this adjustment, the economy could possibly generate a $3 billion surplus within a few years. Given current rates of technological change, the optimistic assumptions listed above for the rest of the decade, and zero growth in 1986-90, Poland might come close to a $3 billion hard currency trade surplus by 1990 (see Table 3). 25X1

The trade surplus would increase more quickly if Warsaw tightened domestic austerity measures. A $3-billion hard currency surplus could be achieved by 1988 with a 6-percent reduction in domestic end-uses from the 1985 plan. The assumption of no capital stock shortage, however, becomes increasingly unrealistic as the time horizon lengthens. Our calculations indicate a 16-percent capital stock shortage by 1988 under the assumptions in Table 4. This bottleneck could be eased through increased investment, but the hard currency import bill would rise sharply because investment has the highest import content among domestic end-uses. In lieu of more investment, Polish capital productivity would have to improve 16 percent by 1988, an unprecedented performance. 25X1

Table 1
Poland: Hard Currency Payments Due in 1985
Under Different Interest Rates and Paris Club Rescheduling Scenarios
(Million US $)

		Interest Rates		
		10%	12%	14%
A)	Payments due to banks	1328	1496	1666
B)	Payments due to other creditors	767	767	767
	Payments to Government creditors			
C)	Interest on 1981 Rescheduling	200	236	273
D)	80% of Arrears from 1981 Rescheduling	334	334	334
	1982-84 Rescheduling Agreement			
E)	Scenario I: 100% of Principal and Interest Rescheduled	1208	1428	1648
	Downpayment	0	0	0
	Moratorium Interest (LIBOR + 1 percent)	1208	1428	1648
	Scenario I total (A + B + C + D + E)	3837	4234	4648
F)	Scenario II: 90% of Principal and Interest Rescheduled	2066	2241	2417
	Downpayment	1099	1099	1099
	Moratorium Interest (LIBOR + 1 percent)	967	967	967
	Scenario II total (A + B + C + D + F)	4695	5074	5457
G)	Scenario III: 95% of Principal Rescheduled	4615	4732	4849
	Downpayment	307	307	307
	Moratorium Interest (LIBOR + 1 percent)	642	759	876
	Interest arrears	3666	3666	3666
	Scenario III total (A + B + C + D + G)	7244	7565	7889

25X1

Source: Polish official data and CIA estimates.

Table 2
Poland: Hard Currency Trade Alternatives in 1985
(Million US $)

Year	Assumption	Exports	Imports	Net Exports
1983	Actual	5402	4317	1085
1984	Estimate	6142	4879	1263
1985	Polish Projection for Paris Club	6600	5200	1400
	POLGNP Projections:			
1985	Plan Targets for Domestic End-Uses and Exports	6529	5051	1478
1985	Plan Targets for Domestic End-Uses Reduced 2 Percent	6529	4728	1801
1985	Plan Targets for Domestic End-Uses Reduced 4 Percent	6529	4561	1968
1985	Plan Targets for Domestic End-Uses Reduced 6 Percent	6529	4350	2179
1985	Plan Targets for Domestic End-Uses Reduced 8 Percent	6529	4180	2349
1985	Plan Targets for Domestic End-Uses Reduced 10 Percent	6529	4115	2414

25X1

Source: Polish official data and CIA estimates.

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Table 3
Poland: Hard Currency Trade Results of Zero Growth 1986-90
(Million US $)

Year	Assumption	Exports	Imports	Net Exports
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1987	Same	6529	4188	2341
1988	Same	6529	3976	2553
1989	Same	6529	3764	2765
1990	Same	6529	3539	2990

25X1

Source: Polish official data and CIA estimates.

Table 4
Poland: Hard Currency Trade Results with "Belt-Tightening," 1986-90
(Million US $)

Year	Assumption	Exports	Imports	Net Exports
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1985	Plan Targets for Domestic End-Uses and Exports	6529	5051	1478
1986	Domestic End-Uses 2 Percent Less than 1985 Plan	6529	4268	2261
1987	Domestic End-Uses 4 Percent Less than 1985 Plan	6529	3698	2831
1988	Domestic End-Uses 6 Percent Less than 1985 Plan	6529	3276	3253
1989	Domestic End-Uses 8 Percent Less than 1985 Plan	6529	2892	3637
1990	Domestic End-Uses 10 Percent Less than 1985 Plan	6529	2603	3926

25X1

Source: Polish official data and CIA estimates.

Methodological Appendix

These calculations were made using the POLGNP model. POLGNP is a system of mathematical equations that determines the Polish economy's requirements for domestic production, hard currency imports, soft currency imports, and energy in order to achieve particular goals for consumption, investment, defense, civilian government, and exports. Dependence on imports and energy adjusts at different rates and in different directions across economic sectors. Furthermore, energy and import requirements are very sensitive to the mix of production as well as its level. Reliable projections of energy and import needs thus require a high degree of disaggregation. POLGNP starts from given targets for seven domestic end uses of GNP and 12 categories of exports. To achieve those targets, POLGNP balances trade-offs between production in 34 domestic sectors, 12 hard currency import categories, and 12 soft currency import categories. After these have been determined, POLGNP derives requirements for capital, labor, and energy in the forms of coal, oil, gas, and hydro/nuclear. [redacted] 25X1

[redacted] 25X1

Because POLGNP's data are all in 1977 domestic zlotys, the hard currency trade figures from POLGNP were converted to dollars by using dollar/zloty ratios derived by comparing dollar figures and POLGNP zloty figures for hard currency exports and imports in 1983. [redacted] 25X1

MEMORANDUM FOR:

SUBJECT: Poland: Payments Capacity in 1985

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Poland: A Debt Payments Crunch for 1985

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